AMENDMENTS TO THE CLAIMS

Please cancel claims 28, 32-34 without prejudice to Applicant's right to reintroduce those claims at a later date or in a continuing application.

Please amend claims 24, 25 and 35, as follows.

The following listing of claims replaces all versions, and listings, of claims in this application.

Listing of Claims:

1-23. (Canceled)

24. (Currently Amended) A method of imaging diagnostic information on the GI tract, the method comprising:

administering to a patient an ingestible imaging capsule;

administering to a patient a composition comprising a fluorescent dye;

flashing illumination within the GI tract, thereby providing a light period and a dark period;

obtaining a fluorescent image of the GI tract tissue during the dark period; and

wirelessly transmitting image data from the ingestible imaging capsule.

25. (Currently Amended) The method of claim 24 comprising obtaining, on an image sensor within ~~an~~ the ingestible capsule, a real image of the tissue during the light period.

26. (Previously Presented) The method of claim 25 comprising obtaining the fluorescent image and the real image on the same image sensor.

27. (Previously Presented) The method of claim 24 wherein flashing comprises alternately illuminating with white light.

28. (Canceled).

29. (Previously Presented) The method of claim 24 comprising focusing light remitted from the GI tract tissue onto an image sensor within an ingestible capsule.

30. (Previously Presented) The method of claim 24 wherein flashing comprises alternately illuminating with monochromatic light and white light.

31. (Previously Presented) The method of claim 25 comprising processing the real image and the fluorescent image to obtain diagnostic information.

32-34. (Canceled)

35. (Currently Amended) A method comprising:

staining cells of an endo-luminal wall;

administering to a patient an in-vivo imaging capsule;

activating illumination of the in-vivo imaging capsule in a flashing mode ~~illuminating said cells with an in-vivo illumination device from within a lumen;~~

capturing light remitted from said cells onto a light detector within the in-vivo imaging capsule.

36. (Previously Presented) The method as in claim 35, wherein said illumination comprises a polychromatic illumination and a monochromatic illumination.

37. (Previously Presented) The method as in claim 35, wherein said capturing comprises capturing a real image and a fluorescent image.